

ABSTRACT

The present invention provides various processes for producing C1 to C4 alcohols, optionally in a mixed alcohol stream, and optionally converting the alcohols to light olefins. In one embodiment, the invention includes directing a first portion of a syngas stream to a methanol synthesis zone wherein methanol is synthesized. A second portion of the syngas stream is directed to a fuel alcohol synthesis zone wherein fuel alcohol is synthesized. The methanol and at least a portion of the fuel alcohol are directed to an oxygenate to olefin reaction system for conversion thereof to ethylene and propylene.